

Product Datasheet

Melflufen hydrochloride

Catalog No. **BP-02431A** · CAS **380449-54-7** · Form **salt · hydrochloride** · Physical state **solid** · Color **Off-white to light yellow** · Version **1.0** · Revision **2026-09-11**

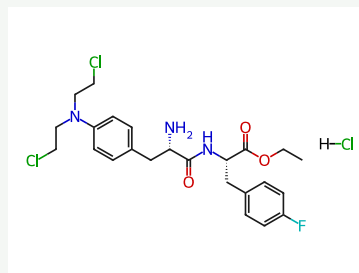
FOR RESEARCH USE ONLY. NOT FOR HUMAN OR VETERINARY USE.

Target DNA Alkylator/Crosslinker; Apoptosis	Research area Cancer
---	--------------------------------

Molecular formula **C₂₄H₃₁Cl₃FN₃O₃**

Molecular weight **534.8790**

STRUCTURE



DESCRIPTION

Melflufen (Melflufen flufenamide) hydrochloride, a dipeptide proagent of Melflufen, is an alkylating agent. Melflufen hydrochloride shows antitumor activity against multiple myeloma (MM) cells and inhibits angiogenesis. Melflufen hydrochloride induces irreversible DNA damage and cytotoxicity in MM cells .

BIOLOGICAL ACTIVITY

In Vitro

Melflufen (Melflufen flufenamide) hydrochloride (0.5-10 μM; 24 hours) decreases viability of MM.1S, INA-6, RPMI-8226, MM.1R, Dox-40, ARP-1, and ANBL-6 cells in a concentration-dependent manner.

? Melflufen hydrochloride induces apoptosis in MM.1S cells.

? Melflufen hydrochloride also is a potent activator of exosome secretion.

In Vivo

Melflufen (Melflufen flufenamide) hydrochloride (3 mg/kg; i.v.; twice-weekly for two weeks) shows anti-MM activity in xenograft mouse model.

SOLUBILITY

Soluble in DMSO/H₂O

REFERENCES

[1].Chauhan D, et al. In vitro and in vivo antitumor activity of a novel alkylating agent, melflufen-flufenamide, against multiple myeloma cells. Clin Cancer Res. 2013;19(11):3019-3031.

[2].Ray A, et al. A novel alkylating agent Melflufen induces irreversible DNA damage and cytotoxicity in multiple myeloma cells. Br J Haematol. 2016;174(3):397-409.

[3].McAndrews KM, et, al. Mechanisms associated with biogenesis of exosomes in cancer. Mol Cancer. 2019 Mar 30;18(1):52.

Tel: +86 20 31130026 · Fax: +86 20 36822386 · tech@biochemprobe.com · www.biochemprobe.com

BiochemProbe is the catalog brand of Guangzhou Yuyuan Biotech Co., Ltd. · For research use only.

Lot CoA and SDS are separate documents.